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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/820,580

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Phillip W. Lucas

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EXAMINER

HOM, SHICK C

ART UNIT

PAPER NUMBER

2666

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/820,580	LUCAS, PHILLIP W.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shick C Hom	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 March 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-15, 18-26, 29-31 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 16, 17, 27 and 28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

Art Unit: 2666

**DETAILED ACTION**

***Claim Objections***

1. Claim 24 is objected to because of the following informalities: in claim 24 line 2 which recite "a header," "an opcode," and "a checksum" seem to refer back to "a header," "an opcode," and "a checksum" recited in claim 23 lines 5-6. If this is true, it is suggested changing "a header," "an opcode," and "a checksum" to ---the header---, ---the opcode---, and ---the checksum---. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

2. Claims 20-22 and 29-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 20 lines 3, 5, 7 which recite "an acknowledge message" is not clear as to whether they're reciting the acknowledge message recited in claim 11 lines 8-9 or a second, a third, and a forth acknowledge message, respectively. Likewise in claim 23 lines 3 and 7 which recite "an acknowledge message" is not clear as to whether they're reciting the acknowledge message of claim 23 line 10.

Art Unit: 2666

Claims 21-22 and 30-31 are rejected under 35 U.S.C. 112, second paragraph because they depend from rejected claims 20 and 29, respectively.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 5, 8-11, 15, 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Bloomfield et al. (5,555,100).

Regarding claims 1, 11:

Bloomfield et al. disclose the method of data communication, comprising: generating a first series of tones, the first series of tones encoding digital data in a predetermined message format (see col. 34 lines 10-55 which recite transmitting the identification number as DTMF transmission clearly anticipate encoding digital data as series of tones); transmitting the first series of tones over a communication medium to a remote device (see col. 10 lines 13-51

Art Unit: 2666

which recite the facsimile store and forward facilities F-SAFF transmitting to the remote destination clearly anticipate the remote device); and receiving a second series of tones, the second series of tones encoding a reply to the transmitted first series of tones in the predetermined message format (see col. 34 lines 10-55 which recite receiving an acknowledgment signal back if no CRC errors occurs in the transmission of the identification number clearly anticipate receiving the second tones in reply to the first tones).

Regarding claim 11:

Bloomfield et al. disclose the use of a remote server (see col. 23 line 15 to col. 24 line 9 which recite one network facsimile server being connected to the router and another connected directly to the PSTN).

Regarding claims 5, 15:

Bloomfield et al. disclose wherein receiving the second series of tones comprises receiving a checksum for the first series of tones (see col. 53 line 61 to col. 54 line 64 which recite if a bad checksum is detected then the checksum error code is generated and sent back to the router).

Regarding claims 8, 18:

Art Unit: 2666

Bloomfield et al. disclose wherein generating the first series of tones comprises generating a series of DTMF tones (see col. 34 lines 10-55 which recite the use of DTMF tones).

Regarding claims 9, 19:

Bloomfield et al. disclose wherein transmitting the first series of tones comprises transmitting over a POTS line (see col. 4 lines 26-60 which recite the wall telephone line clearly anticipate the use of POTS line).

Regarding claim 10:

Bloomfield et al. disclose wherein generating the first series of tones comprises generating a series tones encoding device setup parameters for a broadband telephony device (see col. 51 line 29 to col. 52 line 3 which recite the setup information).

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2666

6. Claims 2-4, 12-14, 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloomfield et al. (5,555,100) in view of Ochiai et al. (6,054,933).

Regarding claim 23:

Bloomfield et al. disclose the communication method, comprising: dialing a predetermined destination address of a remote server and waiting for a POTS connection (see col. 23 line 15 to col. 24 line 9 which recite one network facsimile server being connected to the router and another connected directly to the PSTN and col. 4 lines 26-60 which recite the wall telephone line clearly anticipate the use of POTS line); generating a first series of DTMF tones, the first series of DTMF tones encoding digital data in a predetermined message format (see col. 34 lines 10-55 which recite transmitting the identification number as DTMF transmission clearly anticipate encoding digital data as series of tones) having a checksum (see col. 53 line 61 to col. 54 line 64 which recite if a bad checksum is detected then the checksum error code is generated and sent back to the router); transmitting the first series of DTMF tones over the POTS connection to the remote server (see col. 10 lines 13-51 which recite the facsimile store and forward facilities F-SAFF transmitting to the remote destination); and receiving a second series of DTMF tones, the second series of

Art Unit: 2666

DTMF tones encoding an acknowledge message, the second series of DTMF tones encoding digital data in the predetermined message format (see col. 34 lines 10-55 which recite receiving an acknowledgment signal back if no CRC errors occurs in the transmission of the identification number clearly anticipate receiving the second tones encoding an acknowledge message).

Regarding claim 26:

Bloomfield et al. disclose wherein receiving the second series of DTMF tones comprises receiving a checksum for the first series of DTMF tones (see col. 53 line 61 to col. 54 line 64 which recite if a bad checksum is detected then the checksum error code is generated and sent back to the router).

Regarding claims 2-4, 12-14, 23-25:

For claims 2-4, 12-14, Bloomfield et al. disclose the method described in paragraph 4 of this office action. For claims 2-4, 12-14, 23, Bloomfield et al. disclose all the subject matter of the claimed invention with the exception of providing tones comprises generating a header and opcode as in claims 2-3, 12-13, 23-24 and providing tones each representing a hexadecimal value as in claims 4, 14, 25.

Ochiai et al. from the same or similar fields of endeavor teach that it is known to provide tones comprises generating a header and opcode (see col. 4 lines 4-21 which recite the added



Art Unit: 2666

header and selection code which corresponds to the opcode) and to provide tones each representing a hexadecimal value (see col. 5 lines 5-10 which recite the transmitted data being converted into hexadecimal number to give the original transmit data). Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide tones comprises generating a header and opcode and to provide tones each representing a hexadecimal value as taught by Ochiai et al. in the communications method of Bloomfield et al. The motivation for providing tones comprises generating a header and opcode and tones each representing a hexadecimal value as taught by Ochiai et al. in the communication method of Bloomfield et al. being that it provides the efficiency of using a known method of transmitting text information as DTMF tones to the receiving end.

***Allowable Subject Matter***

7. Claims 20-22 and 29-31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 2666

8. Claims 6-7, 16-17, and 27-28 would be allowable if rewritten to overcome the objection(s), set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tendler discloses transmission of digital data over a wireless network utilizing synthetic voice generation of DTMF tones.

Rummer et al. disclose ATM voice transport protocol.

Ali et al. disclose DTMF download technique for digital telephone devices.

Cioffi discloses ADSL compatible discrete multi-tone apparatus.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the

Art Unit: 2666

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH



DANIEL J. M.  
PRIMARY EXAMINER